

I claim:

1. A computer-implemented method for displaying a transparent image having a plurality of pixels, some of which are transparent, at a location on a display comprising:

5 generating a mask of the transparent image having a plurality of pixels corresponding to the plurality of pixels of the transparent image, such that each pixel of the mask that corresponds to a transparent pixel of the image is set to a first predetermined color, and every other pixel of the mask is set to a second predetermined color;

10 transforming the transparent image such that each pixel thereof that is transparent is set to the second predetermined color;

copying the mask to the location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels 15 of the display; and,

copying the transparent image as has been transformed to the location on the display such that only pixels of the image other than those set to the second predetermined color are copied to corresponding pixels of the display.

20 2. The method of claim 1, wherein the method is further for displaying the

transparent image at a second location on the display, such that the method further comprises:

copying the mask to the second location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding 25 pixels of the display; and,

copying the transparent image as has been transformed to the second location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the display.

5 3. The method of claim 2, wherein the method is further for displaying the transparent image at a third location on the display, such that the method further comprises:

copying the mask to the third location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding

10 pixels of the display; and,

copying the transparent image as has been transformed to the third location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the display.

15 4. The method of claim 1, wherein generating the mask comprises, for an object for the mask having a background color, a text color, and a monochrome bitmap:

setting the background color of the object to the first predetermined color;

setting the text color of the object to the second predetermined color; and,

block-transferring the image to the monochrome bitmap.

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5. The method of claim 1, wherein transforming the transparent image comprises block-transferring an inverse of the mask onto the image with a predetermined and

operation, where the transparent image also has an object therefor having a background color, a text color, and a bitmap.

6. The method of claim 1, wherein copying the mask to the location on the display
5 such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels of the display comprises:

for an object for the location on the display having a background color, a text color, and a bitmap,

setting the background color to the first predetermined color and the text color to

10 the second predetermined color; and,

block-transferring an object for the mask to the object for the location on the display with a predetermined and operation.

7. The method of claim 1, wherein copying the transparent image as has been
15 transformed to the location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the display comprises block-transferring an object for the transparent image to an object for the location on the display with a predetermined or operation.

20 8. The method of claim 1, wherein the second predetermined color comprises a logical zero color referred to as black.

9. The method of claim 1, wherein the first predetermined color comprises a logical one color referred to as white.

10. The method of claim 1, further comprising caching the mask of the transparent
5 image.

11. The method of claim 1, wherein the image comprises one of a plurality of frames of an animation.

10 12. The method of claim 1, wherein the transparent image as displayed at the location on the display is shrunk and/or stretched.

13. A machine-readable medium having instructions stored thereon for execution by a processor to perform a method for displaying a transparent image having a plurality of pixels, some of which are transparent, at least one location on a display comprising:
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performing once a first stage comprising:
generating a mask of the transparent image having a plurality of pixels corresponding to the plurality of pixels of the transparent image, such that each pixel of the mask that corresponds to a transparent pixel of the image is set to a first
20 predetermined color, and every other pixel of the mask is set to a second predetermined color;

transforming the transparent image such that each pixel thereof that is transparent is set to the second predetermined color; and,

Sub A3 5 performing for each location at which the image is to be displayed a second stage comprising:

copying the mask to the location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels of the display;

copying the transparent image as has been transformed to the location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the display.

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10 14. The medium of claim 13, wherein generating the mask comprises, for an object for the mask having a background color, a text color, and a monochrome bitmap:

setting the background color of the object to the first predetermined color;

setting the text color of the object to the second predetermined color; and,

block-transferring the image to the monochrome bitmap.

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15. The medium of claim 13, wherein transforming the transparent image comprises block-transferring an inverse of the mask onto the image with a predetermined and operation, where the transparent image also has an object therefor having a background color, a text color, and a bitmap.

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16. The medium of claim 13, wherein copying the mask to the location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels of the display comprises:

for an object for the location on the display having a background color, a text color, and a bitmap, setting the background color to the first predetermined color and the text color to the second predetermined color; and,

block-transferring an object for the mask to the object for the location on the
5 display with a predetermined and operation.

17. The medium of claim 13, wherein copying the transparent image as has been transformed to the location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the

10 display comprises block-transferring an object for the transparent image to an object for the location on the display with a predetermined or operation.

18. The medium of claim 13, wherein performing once the first stage further comprises caching the mask of the transparent image.

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19. A computer-implemented method for displaying a transparent image having a plurality of pixels, some of which are transparent, at a location on a display comprising:
generating a mask of the transparent image having a plurality of pixels corresponding to the plurality of pixels of the transparent image, such that each pixel of the mask that corresponds to a transparent pixel of one of the transparent image and a pattern image is set to a first predetermined color, and every other pixel of the mask is set to a second predetermined color;

transforming the transparent image such that each pixel thereof that is transparent is set to the second predetermined color;

copying the mask to the location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels of the display; and,

copying the transparent image as has been transformed to the location on the display such that only pixels of the mask other than those set to the second predetermined color are copied to corresponding pixels of the display.

10 20. The method of claim 19, wherein the pattern image comprises a dithering pattern image.

21. The method of claim 19, wherein the pattern image comprises a dithering pattern image used in alpha blending.

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22. A computer comprising:

a display;
a class library having a function designed to display a transparent image on the display, the function caching a mask for the image and a transformation of the image

20 used for displaying the image, such that subsequent calls to the function for displaying the image omit regenerating the mask and retransforming the image; and,

an application program designed to call the function of the class library a plurality of times to display the image at different locations on the display.

23. The computer of claim 22, wherein the class library comprises at least one computer program executed by a processor of the computer from a computer-readable medium thereof.

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24. The computer of claim 22, wherein the function further generates the mask such that the mask has a plurality of pixels corresponding to the plurality of pixels of the transparent image, such that each pixel of the mask that corresponds to a transparent pixel of the image is set to a first predetermined color, and every other pixel of the mask is set

10 to a second predetermined color.

25. The computer of claim 24, wherein the function further transforms the transparent image such that each pixel thereof that is transparent is set to the second predetermined color.

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26. The computer of claim 24, wherein the function is to display the image by copying the mask to the location on the display such that only pixels of the mask that have been set to the second predetermined color are copied to corresponding pixels of the display, and by copying the transformation of the image to the location on the display

20 such that only pixels of the transformation other than those set to the second predetermined color are copied to corresponding pixels of the display.